



**UNITED STATES DEPARTMENT OF COMMERCE**  
**Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

08/621,631 03/26/96 BROWN

P 621.631

PM92/0205

EXAMINER

MILLER, E

THOMAS E. KELLEY  
CABOT CORPORATION  
157 CONCORD ROAD  
BILLERICA MA 01821

ART UNIT

PAPER NUMBER

3641

DATE MAILED: 02/05/01

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.

08/621,631

Applicant(s)

BROWN ET AL.

Examiner

Edward A. Miller

Art Unit

3641

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 11 September 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 3-22 is/are pending in the application.
- 4a) Of the above claim(s) 4-9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3 and 10-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other:

Art Unit: 3641

1. The text of those sections of Title 35, U. S. Code, not included herein can be found in a prior Office action.
2. The single ultimate species remains the same as set forth in Paper No. 29, filed September 11, 2000. As now understood, claims 4-9 are nonelected and claims 3 and 10-22 are drawn to the elected species.
3. Claim 22 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 22 contains new matter in the double recitation of lines 5-7 and 9-11, with HF removal in both instances. Basis for this change is neither pointed out nor apparent. Applicant should point out the basis for this language or cancel the new matter.
4. Claim 10 is rejected under 35 U.S.C. 102(b or e) as anticipated by or, in the alternative, under 35 U.S.C. 103 as obvious over each of the Harbuck et al. article and Carlson '970.

In Carlson '970, note "Example E", col. 15-16, where scandium is recovered by extraction with DEHPA and then stripped with 2M NaOH, the scandium extraction being quantitative. This is from the earlier process of "Example B", col. 10, which may be from a sulfuric/boric acid leach, line 42, or via sulfuric acid alone, line 52. In Harbuck et al., pages 109-110, strong sulfuric acid worked well, as did extraction with DEHPA at pages 114-115, and stripping with NaOH on page 116, for example. To the extent necessary, variation of parameters would have been obvious to one of ordinary skill in the art. It is well settled that optimizing a result effective variable is well within the expected ability of a person or ordinary skill in the subject art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980), *In re Aller*, 220 F.2d 454, 105 USPQ 233 (CCPA 1955).

Art Unit: 3641

5. Claims 3 and 10-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carlson '970.

Note col. 3, lines 1-30 and col. 5, lines 17-20, e.g., teaching source material. "Example B" in col. 10 further teaches reacting the source material, at lines 51-53, e.g. Eventual recovery of scandium, and organo-phosphate extraction is taught in "Example E", in col. 15-16. In any event, variation of the taught plural, sequential stages and other parameters would have been obvious, per the case law cited above. This is as the claims are understood.

6. Claims 3 and 10-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Throughout, phrases are not clear and the steps from one claim to another, a dependent claim, e.g., are not properly correlated. For example, in claim 17, "the mineral acid" is indefinite since there are several such in claim 16, at lines 3 and 9. In claim 3, lines 5 and 7, it is not clear what the "other" values refer to. The correlation of steps in claim 10 to the steps in claims dependent thereon is unclear. There are exemplary of problems found throughout.


7. Any inquiry concerning either this or an earlier communication from the Examiner should be directed to Examiner Edward A. Miller at (703) 306-4163. Examiner Miller may normally be reached daily, except alternate Fridays, from about 9:30 AM to 7 PM.

If attempts to reach Examiner Miller by telephone are unsuccessful, his supervisor Mr. Carone can be reached at (703) 306-4198. The Group fax number is (703) 305-7687.

If there is no answer, or for any inquiry of a general nature or relating to the application status, please call the Group receptionist at (703) 308-1113.

Miller/ph  
January 11, 2001

EDWARD A. MILLER  
PRIMARY EXAMINER

  
EDWARD A. MILLER  
PRIMARY EXAMINER